

four quadrant electrodes on the second face surface of at least one layer, wherein the quadrant electrodes are arranged in a checkerboard pattern.

7. (Amended) A piezoelectric micromotor according to claim 6 wherein at least two non-contiguous face surfaces have quadrant electrodes.

10. (Amended) A piezoelectric micromotor according to claim 6 wherein for at least one layer the at least one power supply electrifies a first pair of diagonally disposed quadrant electrodes with a first AC voltage and a second pair of quadrant electrodes along a second diagonal with a second AC voltage and wherein the first and second AC voltages are  $180^\circ$  out of phase and have a same magnitude, so as to excite transverse vibrations in the piezoelectric vibrator.

12. (Amended) A piezoelectric motor according to claim 43 wherein the at least one power source controls magnitudes of AC voltages used to excite longitudinal and transverse vibrations to selectively provide different forms and amplitudes of vibratory motion of the contact region in a plane parallel to the planes of the layers.

13. (Amended) A piezoelectric motor according to claim 43 wherein the at least one power source controls phases of AC voltages used to excite longitudinal and transverse vibrations to selectively provide different forms of vibratory motion of the contact region in a plane parallel to the planes of the layers.

14. (Amended) A piezoelectric motor according to claim 43 wherein the at least one power source controls frequencies of AC voltages used to excite longitudinal and transverse vibrations to selectively provide different forms of vibratory motion of the contact region in a plane parallel to the planes of the layers.

15. (Amended) A piezoelectric micromotor according to claim 6 wherein for at least one layer the at least one power supply electrifies a first pair of electrodes along a first short edge of the layer and a second pair of quadrant electrodes along a second short edge with first and second AC voltages respectively that are  $180^\circ$  out of phase and have a same magnitude, so as to excite bending vibrations perpendicular to the planes of the layers in the piezoelectric vibrator.

18. (Amended) A piezoelectric motor according to claim 49 wherein the at least one power source controls magnitudes of AC voltages used to excite longitudinal and bending vibrations to selectively provide different forms and amplitudes of vibratory motion of the contact region in a plane perpendicular to the planes of the layers.

19. (Amended) A piezoelectric motor according to claim 49 wherein the at least one power source controls phases of AC voltages used to excite longitudinal and bending vibrations to selectively provide different forms of vibratory motion of the contact region in a plane perpendicular to the planes of the layers.

20. (Amended) A piezoelectric motor according to claim 49 wherein the at least one power source controls frequencies of AC voltages used to excite longitudinal and transverse vibrations to selectively provide different forms of vibratory motion of the contact region in a plane parallel to the planes of the layers.

21. (Amended) A piezoelectric micromotor according to claim 6 wherein, for at least one layer, the at least one power supply electrifies a pair of quadrant electrodes that lie along a first diagonal of the layer with an AC voltage while a pair of quadrant electrodes along a second diagonal of the layer are grounded or floating, in order to excite elliptical vibrations in the vibrator.

23. (Amended) A piezoelectric motor according to claim 21 wherein the at least one power supply controls the frequency of the AC voltage to selectively control the eccentricity of the elliptical motion.

24. (Amended) A piezoelectric micromotor according to claim 1 and comprising at least one relatively thin layer of non-piezoelectric material having large rectangular face surfaces defined by long and short edges and relatively narrow long and short edge surfaces.

27. (Amended) A piezoelectric micromotor according to claim 25 wherein the other edges of the at least one non-piezoelectric layer are slightly longer than the corresponding other edges of the piezoelectric layers so that at least one edge surface of the non-piezoelectric layer protrudes from the piezoelectric layers.

29. (Amended) A piezoelectric micromotor according to claim 27 wherein the contact region comprises a region of one of the at least one protruding edge surface.

30. (Amended) A piezoelectric micromotor according to claim 25 wherein the at least one non-piezoelectric layer is formed from a metal.

31. (Amended) A piezoelectric micromotor according to claim 1 wherein the power supply is capable of electrifying the electrodes to cause motion in a selectively arbitrary direction in the plane of edge surfaces on which the contact surface is located.

38. (Amended) A method according to claim 33 wherein the piezoelectric motor comprises at least one piezoelectric layer and wherein the first and second electrodes are on the same layer.

39. (Amended) A method according to claim 33 wherein the piezoelectric motor comprises a plurality of piezoelectric layers and wherein the first and second electrodes are on different layers.

43. (New) A piezoelectric micromotor according to claim 10 wherein the at least one power supply electrifies all quadrant electrodes on the second face surface of at least one but not all the layers with a same AC voltage so as to excite longitudinal vibrations in the vibrator and thereby in the contact surface wherein longitudinal vibrations are vibrations perpendicular to the edges of the layers on which the contact region is situated.

44. (New) A piezoelectric micromotor according to claim 10 and comprising a single large electrode on the second face surface of at least one but not all layers.

45. (New) A piezoelectric micromotor according to claim 44 wherein the power supply electrifies a large electrode on the second face surface of at least one layer with an AC voltage to excite longitudinal vibrations in the vibrator and thereby in the contact region wherein longitudinal vibrations are vibrations perpendicular to the edges of the layers on which the contact region is situated.

46. (New) A piezoelectric motor according to claim 45 wherein the at least one power source controls magnitudes of AC voltages used to excite longitudinal and transverse vibrations to selectively provide different forms and amplitudes of vibratory motion of the contact region in a

plane parallel to the planes of the layers.

47. (New) A piezoelectric motor according to claim 45 wherein the at least one power source controls phases of AC voltages used to excite longitudinal and transverse vibrations to selectively provide different forms of vibratory motion of the contact region in a plane parallel to the planes of the layers.

48. (New) A piezoelectric motor according to any of claims 45 wherein the at least one power source controls frequencies of AC voltages used to excite longitudinal and transverse vibrations to selectively provide different forms of vibratory motion of the contact region in a plane parallel to the planes of the layers.

49. (New) A piezoelectric micromotor according to claim 15 wherein the at least one power supply electrifies all quadrant electrodes on the second face surface of at least one but not all the layers with a same AC voltage so as to excite longitudinal vibrations in the vibrator and thereby in the contact surface wherein longitudinal vibrations are vibrations perpendicular to the edges of the layers on which the contact region is situated.

50. (New) A piezoelectric micromotor according to claim 15 and comprising a single large electrode on the second face surface of at least one but not all layers.

51. (New) A piezoelectric micromotor according to claim 50 wherein the power supply electrifies a large electrode on the second face surface of at least one layer with an AC voltage to excite longitudinal vibrations in the vibrator and thereby in the contact region wherein longitudinal vibrations are vibrations perpendicular to the edges of the layers on which the contact region is situated.

52. (New) A piezoelectric motor according to claim 50 wherein the at least one power source controls magnitudes of AC voltages used to excite longitudinal and transverse vibrations to selectively provide different forms and amplitudes of vibratory motion of the contact region in a plane parallel to the planes of the layers.

53. (New) A piezoelectric motor according to claim 50 wherein the at least one power source controls phases of AC voltages used to excite longitudinal and transverse vibrations to selectively